but does reach the desert, extending eastward barely into Nevada; it is not known from Arizona. *Pellaea mucronata* is here considered to be one of several "Californian" elements (discussed below) that extend eastward to meet elements from

Several additional ferns may ultimately be found in the New York Mountains. These fall into two categories: *1*) those with distributions primarily to the south and east (Sonoran element); and 2) those with distributions in the eastern Mojave and Colorado Deserts and westward (Californian element). There are three such ferns in the first category:

Notholaena cochisensis Goodding occurs in limestone in the Providence Mountains and on a bluish limestone (much like that in Keystone Canyon) on Clark Mountain. It is to be expected on limestone in the New York Mountains but at elevations somewhat lower than the floor of Keystone Basin. Hevly (J. Ariz. Acad. Sci. 3:205–208. 1965) recognized this as a species separate from *N. sinuata* (Lag. ex Swartz) Kaulf., a distinction we support on morphological, geographical, and ecological grounds.

Asplenium resiliens Kunze has been reported recently in the Spring Mountains of Nevada (Fisher, Madroño 23:72. 1975), where it occurs on Navajo sandstone. The species may occur on shaded limestone or limey sandstone cliffs in other ranges of the eastern Mojave Desert at elevations somewhat below those of Keystone Basin.

Cheilanthes fendleri Hook. was reported from southern California by Cronquist et al. (Intermountain Flora 1:205. 1972), but Cronquist indicates (in litt.) that the inclusion of California was based on misidentified collections. Still, it is another Sonoran element that may occur in the eastern Mojave.

There are four ferns of the second category that may eventually be found in the New York Mountains. *Notholaena californica* D. C. Eaton and *Cheilanthes viscida* Davenport have not yet been recorded for the eastern Mojave ranges; they might be expected in the Granite Mountains. *Notholaena parryi* D. C. Eaton, a widespread fern of moderate elevations in the deserts, can be expected anywhere in the eastern Mojave ranges below 1550 m. We have seen specimens from the Providence Mountains (Bonanza Mine, *Opler s.n.*, OM). *Cheilanthes covillei* Maxon has been collected in the Providence Mountains (*Wolf 10688,* UC) and may be present in the New York Mountains. This species is very closely related to *C. wootonii*. We expect all four species to be most prominent near the westernmost parts of the eastern Mojave ranges.—C. Don MacNeill, The Oakland Museum, Oakland, CA 94607, William Brophy, Chabot College, Hayward, CA 94545, and Alan R. Smith, University Herbarium, Department of Botany, University of California, Berkeley, CA 94720.

Diploid Claytonia perfoliata from Southern Mexico.—Prior studies of *Claytonia perfoliata* Willd. [*Montia perfoliata* (Willd.) T. Howell] (Miller, Syst. Bot. 1:20–34. 1976; Fellows, Madroño 23:296–297. 1976; Swanson, Ph.D. Dissertation, Univ. California, Berkeley, 1964) revealed two morphologically different diploids ($2n = 12$), which were called "Channel Islands" or "Coastal" (referable to *C. perfoliata* ssp. *perfoliata*) and "Montane" [= *C. rubra* (T. Howell) Tidestrom]. These diploid species are easily distinguishable morphologically. The former is characterized by petals 3 to 4 mm long, linear juvenile basal leaves, deltoid mature basal leaves (with mucronate tips), green herbage, and a perfoliate to only slightly cleft cauline leaf disc. *Claytonia rubra* has petals similar in length to those of *C. perfoliata* ssp. *perfoliata;* and deltoid mature basal leaves. However, the juvenile leaves are never linear but instead are rhombic, and the cauline leaves are free or are united on only one side of the scape. As the name implies, *C. rubra* is characterized by livid beet-red foliage coloration, particularly on the abaxial leaf surfaces, although green-leaved morphs may be encountered in some populations.

Mexican populations at 3200 m on the slopes of Popocatepetl and 3000 m on Cerro Ajusco were examined cytologically ($2n = 12$; México, Distrito Federal, Slopes of Cerro Ajusco, 2 km E of Estacion La Cima on Hwy. 95, *Miller 568;* Estado México: Slopes of Popocatepetl, 12.5 km E of Hwy. 115 junction on the road from Amecameca to Tlamacas, *Miller 570;* Slopes of Popocatepetl, 5.5 km W of Paso de Cortez on the road from Tlamacas to Amecameca, *Miller 571;* Municipio Amecameca, *Rodriguez 1460*). These populations are morphologically indistinguishable from diploid *C. perfoliata* ssp. *perfoliata* found in coastal California and on the Channel Islands. In contrast to *C. rubra*, which is common in drier northern montane and transmontane coniferous woodlands, diploid *C. perfoliata* ssp. *perfoliata* is more southern in distribution, ranging from coastal and cismontane California, through the Sonoran Desert, to high elevation coniferous forests of Mexico and Guatemala. Herbarium specimens examined from Durango, Queretaro, Hidalgo, Jalisco, Distrito Federal, Puebla, México, Morelos, and Cuesta El Caracol in Guatemala, indicate relative homogeneity of Mexican and Guatemalan populations, not only in their striking resemblance to the known diploid populations cited above but also in their elevational distribution and habitat preference.

Voucher specimens and permanent microslides for the chromosome counts reported here are deposited in OSC. Duplicate cytovouchers are deposited in CAS and ENCB. I am grateful to Dr. J. Rzedowski and Miss L. S. Rodríguez of the Escuela Nacional de Ciencias Biologicas for their help with field work and to the National Science Foundation for financial assistance (Doctoral Dissertation Research Grant DEB 76-06048).—John M. Miller, Department of Botany and Plant Pathology, Oregon State University, Corvallis 97331.

Nomenclatural Changes in Spilanthes, Lycopersicon, and Opuntia for the Galápagos Islands.—Research on the endemic flora of the archipelago reveals that the following nomenclatural changes must be made:

(1). *Spilanthes diffusa* Hook. f. (Trans. Linn. Soc. London 20:214. 1847) is a later homonym of *S. diffusa* Poepp. & Endl. (Nov. Gen. Sp. Pl. 3:50. 1843). No other specific epithet being available for the former taxon, the following is proposed: **Spilanthes darwinii** D. M. Porter, *nomen novum* [Holotype: *Darwin,* end of Sept. 1835, Charles Island (CGE).].

(2). The widespread Galápagos tomato (*Lycopersicon cheesmanii* Riley) has long been recognized to consist of two infraspecific taxa, f. *cheesmanii* and f. *minor* (Hook. f.) Muller. However, recognition at a higher taxonomic rank is warranted, and the following combination is proposed: **Lycopersicon cheesmanii** var. **minor** (Hook. f.) D. M. Porter, *comb. nov.* [Basionym: *Lycopersicon esculentum* var. *minor* Hook. f., Trans. Linn. Soc. London 20:202. 1847. Holotype: *Darwin,* beg. of Oct. 1835, James Island (CGE).].

(3). **Opuntia megasperma** var. **orientalis** (J. T. Howell) D. M. Porter, *status novum* [Basionym: *O. megasperma* subsp. *orientalis* J. T. Howell, Proc. Calif. Acad. Sci., ser. 4, 21:48. 1933. Holotype: *Stewart 3003,* Hood Island (CAS).]. **Opuntia echios** var. **gigantea** (J. T. Howell) D. M. Porter, *status novum* [Basionym: *O. echois* subsp. *gigantea* J. T. Howell, op. cit. 51. 1933. Holotype: *Howell 9112,* Indefatigable Island (CAS).].

These two taxa inadvertantly were included under the varietal rank in I. L. Wiggins and D. M. Porter's *Flora of the Galápagos Islands* (Stanford Univ. Press, Stanford, 1971) by E. F. Anderson and D. L. Walkington in their treatment of the Cactaceae, although new status was neither proposed nor effected. Recognition at the varietal level is desirable in order to conform with the classification of the genus in the archipelago. Where infraspecific taxa have been recognized in these species and in *O. galapageia* Hensl., they have been designated as varieties. Such trivial nomenclatural problems could be avoided if Raven, Shetler, and Taylor's "Proposals for the simplification of infraspecific terminology" (Taxon 23:828–831.